FACULTY OF MEDICINE

STUDY PROGRAM 0912.1 MEDICINE

DEPARTMENT OF INTERNAL MEDICINE / DISCIPLINE OF INTERNAL MEDICINE - CLINICAL SYNTHESIS

APPROVED
at the meeting of the Commission for Quality Assurance and Evaluation of the Curriculum in Medicine/Pharmacy/ Dentistry
Minutes No. 7 of 17.06.24
Chairman Prof. univ., Dr. hab.
Andrei Pădure _____
(signature)

APPROVED
at the Council meeting of the Faculty
_____
Minutes No. 10 of 18.06.24
Dean of Faculty PhD, univ. prof.
Gheorghe Plăcintă _____
(signature)

APPROVED
at the meeting of the Discipline Internal Medicine – Clinical Synthesis
Minutes No. 12 of 17 Mai 2024
Head of the Discipline, MD, PhD, univ prof.,
Sergiu Matcovschi _____

SYLLABUS

DISCIPLINE: INTERNAL MEDICINE - CLINICAL SYNTHESIS. CLINICAL CASE-BASED TRAINING.

Integrated studies / Cycle I, License

Tipe of course: **Compulsory**

Curriculum developed by the team of authors:

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- **INTRODUCTION**

- **General presentation of the discipline: place and role of the discipline in the specific competence formation of the professional specialty training program**

The Internal Medicine is an integrative clinical medical discipline. Studying it in the university will create skills and necessary support to suggest the correct diagnosis based on history, clinical examination and laboratory findings, learning the concepts necessary for the differential diagnosis and creation of necessary skills to address emergencies, acquirement of prophylaxis and treatment of internal diseases.

- **Mission of the curriculum (aim) in professional training**

Strengthening the basic knowledge of the pathology of the internal organs and their implementation in practice; knowledge of the development, diagnosis, appropriate treatment and prevention of the internal diseases, development of the clinical reasoning and medical synthesis which are the defining elements in the preparation of any physician.

- **Language (s) of the discipline**: Romanian, English, Russian.
- **Beneficiaries**: 6th year students, faculty of Medicine 1 and 2, specialty of Medicine.

II. MANAGEMENT OF THE DISCIPLINE

Code of discipline		S.12.O.101	
Name of the discipline		Internal medicine – Clinical synthesis. Clinical case based-training.	
Person(s) in charge of the discipline		MD, PhD, univ prof., Sergiu Matcovschi	
Year	**6**	Semester/Semesters	**12**
Total number of hours, including:			**150**
Lectures	**30**	Practical/laboratory hours	**30**
Seminars	**30**	Self-training	**60**
Form of assessment	**E**	Number of credits	**5**

III. TRAINING AIMS WITHIN THE DISCIPLINE

At the end of the discipline study the student will be able to:

- ***at the level of knowledge and understanding***
  - to improve and strengthen the knowledge accumulated in the field of the Internal Medicine in the 4th and 5th year, enrich and deepen them;
  - study of atypical variants of internal diseases;
  - the correct assessment of the data obtained in the examination of the patient in the view of instrumental and laboratory examination;
  - learn the tactics of diagnosis and treatment.
- ***at the application level***
  - better knowledge and experience accumulation in diagnosis, differential diagnosis and treatment of the internal diseases;
  - assessing the results of the laboratory and instrumental investigations; Meeting and drafting medical documents;
  - providing clinical training in the internal medicine in conditions maximally close to independent physician practice;
  - elaboration of scientific research projects in the internal medicine.
- ***at the level of integration***
  - assessing the importance of internal pathology in the context of general medicine and related medical disciplines;
  - the evolution of the physiological processes, etiology and pathophysiology of diseases in adults;
  - further development of clinical thinking based on the principles of the syndrome diagnosis, the intersyndromal differential diagnosis and strictly individual treatment of various internal diseases;
  - creative approach to the internal medicine problems;
  - the deduction of interrelations between the internal medicine and other medical disciplines (phtysiology, oncology, endocrinology etc.)
  - the ability to evaluate and self-assess knowledge in the field;
  - the ability to understand new developments in the internal medicine.

IV. PROVISIONAL TERMS AND CONDITIONS

To acquire better discipline of the Internal Medicine (Clinical Synthesis) developing a profound knowledge in the subjects studied in the previous years (internal medicine semiology, phtysiology, oncology, endocrinology etc.) is required.

V. THEMES AND ESTIMATE ALLOCATION OF HOURS

Lectures, practical hours/ laboratory hours/seminars and self-training

No. d/o	THEME	Number of hours		
		Lectures	Practical hours	Self-training
1.	Differential diagnosis of syndrome of pulmonary consolidation.	2	4	4
2.	Differential diagnosis of broncho-obstructive syndrome.	2	4	4
3.	Differential diagnosis of pleural effusion.	2	4	4
4.	Differential diagnosis of diffuse interstitial pneumopathies.	2	4	4
5.	Differential diagnosis of cardiac chest pain.	2	4	4
6.	Differential diagnosis of cardiac arrhythmias and blocks.	2	4	4
7.	Differential diagnosis of arterial hypertension.	2	4	4
8.	Differential diagnosis and treatment of non-coronary diseases of the myocardium.	2	4	4
9.	Differential diagnosis of abdominal pain.	2	4	4
10.	Differential diagnosis of intestinal dysfunction.	2	4	4
11.	Differential diagnosis of hepatomegaly. Differential diagnosis of jaundice.	2	4	4
12.	Differential diagnosis of portal hypertension and its complications.	2	4	4
13.	Differential diagnosis of edemas syndrome.	2	4	4
14.	Differential diagnosis of articular syndrome.	2	4	4
15.	Differential diagnosis of syndrome of fever of unknown origin.	2	4	4
Total		**30**	**60**	**60**

VI. PRACTICAL TOOLS PURCHASED AT THE END OF THE COURSE

Mandatory essential practical tools are:

- performing the clinical and paraclinical diagnosis (laboratory and instrumental) of each nosological entity with its argumentation;
- making the differential diagnosis and its argumentation;

- elaboration of the deployed clinical diagnosis (basic disease, complications and comorbidities);
- elaboration of the paraclinical examination plan with its argumentation;
- elaboration of the personalized treatment plan (of the basic disease and comorbidities) with its argumentation;
- the ability to integrate knowledge in the fields of fundamental, preclinical and clinical disciplines.

VII. OBJECTIVES AND CONTENT UNITS

Objective	Content units
Theme (chapter) 1. Differential diagnosis of syndrome of pulmonary consolidation.	
• To define	- pulmonary consolidation syndrome
• To know	-a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument;
• To demonstrate	-to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument;
• To apply	-knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet).
• To integrate	- knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 2. Differential diagnosis of broncho-obstructive syndrome.	
• To define • To know	- broncho-obstructive syndrome.

Objective	Content units
• To demonstrate • To apply • To integrate	-a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 3. Differential diagnosis of pleural effusion.	
• To define • To know • To demonstrate	- pleural effusion syndrome. -a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments;

Objective	Content units
• To apply To integrate	-to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 4. Differential diagnosis of diffuse interstitial pneumopathies.	
• To define • To know • To demonstrate • To apply To integrate	- diffuse interstitial pneumopathies. -a detailing of diffuse interstitial pneumopathies, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by interstitial pneumopathies; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 5. Differential diagnosis of cardiac chest pain.	
• To define • To know	- cardiac chest pain syndrome.

Objective	Content units
• To demonstrate • To apply • To integrate	-a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 6. Differential diagnosis of cardiac arrhythmias and blocks.	
• To define • To know • To demonstrate	- cardiac arrhythmias and blocks. -a detailing of cardiac arrhythmias and blocks, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by cardiac arrhythmias and blocks; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments;

Objective	Content units
• To apply • To integrate	-to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 7. Differential diagnosis of arterial hypertension.	
• To define • To know • To demonstrate • To apply • To integrate	- arterial hypertension. -a detailing of the arterial hypertension, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by arterial hypertension; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 8. Differential diagnosis and treatment of non-coronary diseases of the myocardium.	
• To define	- non-coronary diseases of the myocardium

Objective	Content units
• To know	-a detailing of the non-coronary diseases of the myocardium, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument;
• To demonstrate	-to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument;
• To apply	-knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet).
• To integrate	- knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 9. Differential diagnosis of abdominal pain.	
• To define	- abdominal pain syndrome
• To know	-a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument;
• To demonstrate	-to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments;

Objective	Content units
• To apply • To integrate	-to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 10. Differential diagnosis of intestinal dysfunction.	
• To define • To know • To demonstrate • To apply • To integrate	- intestinal dysfunction syndrome -a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 11. Differential diagnosis of hepatomegaly. Differential diagnosis of jaundice.	
• To define	- hepatomegaly and jaundice syndromes.

Objective	Content units
• To know	-a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument;
• To demonstrate	-to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument;
• To apply	-knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet).
• To integrate	- knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 12. Differential diagnosis of portal hypertension and its complications.	
• To define	- portal hypertension syndrome
• To know	-a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument;
• To demonstrate	-to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments;

Objective	Content units
• To apply • To integrate	-to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 13. Differential diagnosis of edematous syndrome.	
• To define • To know • To demonstrate • To apply • To integrate	- edematous syndrome. -a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 14. Differential diagnosis of articular syndrome.	
• To define • To know	- articular syndrome.

Objective	Content units
• To demonstrate • To apply • To integrate	-a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments; -to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.
Theme (chapter) 15. Differential diagnosis of syndrome of fever of unknown origin.	
• To define • To know • To demonstrate	- fever of unknown origin syndrome. -a detailing of the syndrome, which includes pathophysiology, semiology, modern methods of investigation, meaning of the syndrome for nosological diagnosis; -the diseases that are manifested by the syndrome concerned; -modern aspects of etiology and pathogenesis of the diseases discussed in each subject; -a clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its argument; -to perform the clinical and paraclinical (laboratory and instrumental) diagnosis of each nosological entity with its arguments; -to perform the differential diagnosis and its argumentation; -to develop the clinical diagnosis (basic disease, complications and comorbidities); -to draw up the paraclinical examination plan with his arguments;

Objective	Content units
• To apply • To integrate	-to draw up the personalized treatment plan (basic illness and comorbidities) with his argument; -knowledge and practical skills accumulated; -algorithm for diagnosis, differential diagnosis and treatment in eventual emergency situations; -knowledge related to the preparation of the medical documentation (observation sheet, stage epicrisis, transfer and discharge, extract from the observation sheet, statistical sheet). - knowledge in the fields of fundamental, preclinical and clinical disciplines.

VIII. PROFESSIONAL (SPECIFIC (SC)) AND TRANSVERSAL (TC) COMPETENCES AND STUDY FINALITIES

✓ **Professional (special) competences (SC)**

- ***PC1.*** Responsible execution of professional tasks with the application of the values and norms of professional ethics, as well as the provisions of the current legislation.
- ***PC2.*** Adequate knowledge of the sciences about the structure of the body, physiological functions and behavior of the human body in various physiological and pathological conditions, as well as the relationships between health, physical and social environment.
- ***PC3.*** Resolving clinical situations by developing a plan for diagnostics, treatment and rehabilitation in various pathological situations and choosing the appropriate therapeutic procedures for them, including the provision of emergency medical care.
- ***PC4.*** Promoting a healthy lifestyle, applying prevention and self-care measures.
- ***PC5.*** Interdisciplinary integration of the doctor's activity in a team with efficient use of all resources.
- ***PC6.*** Conducting scientific research in the field of health and in other branches of science.
- ***PC7.*** Promoting and ensuring the prestige of the medical profession and raising the professional level.
- ***PC8.*** Realization of pedagogical and methodological-didactic activities in the field of healthcare in higher and professional technical educational institutions

✓ **Transversal competences (TC)**

- ***TC1.*** Autonomy and responsibility in the activity.
- ***TC2.*** Effective communication and digital skills.
- ***TC3.*** Achieving interaction skills and social responsibility.
- ***TC4***. Personal and professional development.

✓ **Study purposes**

- To know the evolutionary peculiarities of internal diseases against the background of comorbidities.
- To know the methodology of differential diagnosis of internal diseases.
- To know the role of clinical, laboratory and instrumental investigations in the differential diagnosis of internal diseases.
- To be competent to prescribe personalized treatment in patients with multiple comorbidities.
- To be able to deduce interrelations between internal medicine and other medical disciplines (phtysiology, oncology, hematology, etc.) by performing interdisciplinary clinical synthesis.
- To be able to acquire the new achievements of internal medicine daily

IX. STUDENT'S SELF-TRAINING

No.	Expected product	Implementation strategies	Assessment criteria	Implementation terms
1.	Working with informational sources:	Carefully reading lectures and manual materials. Reading the subject questions, which requires a subject reflection. Getting acquainted with the list of additional information sources on the topic. Selecting the additional information sources of the topic. Carefully reading the entirety of the text and writing of the essential content. Forming generalizations and conclusions regarding the importance of the topic / subject.	Ability to extract the essentials; interpretative skills; the work volume.	Throughout the module
2.	Working with online materials	Studying on-line materials from the WEB page of the discipline and from other sites with specialized databases and literature	Presentations of results at practical classes and seminars	Throughout the module
3.	Different learning techniques		The volume of work, the level of insight into different subjects, the level of scientific argumentation, the	Throughout the module

	application		quality of the conclusions, the elements of creativity, the demonstration of the problem understanding, the demonstration of the clinical reasoning, the practical abilities, the formation of the personal attitude	
4.	Examination of patients during practical work and night shifts.	Patient examination, correct assessment of the data obtained in the patient's immediate examination, in the laboratory and instrumental examination; acquisition of diagnostic tactics, differential diagnosis and individual treatment.	Correct formulation and argumentation of the patient's diagnosis, investigation plan and treatment plan.	Daily, during the module
5.	Preparation and conducting of presentations / reports.	Selecting of the presentations / reports topic and the terms of the achievement. Peer reviews. Teacher reviews.	The work volume, the degree of penetration in the essence of the presentation / reports, the argumentation level, the conclusions quality, the creativity elements, the personal attitude formation, the graphic presentation, the presentation method.	Throughout the module

X. METHODOLOGICAL SUGGESTIONS FOR TEACHING-LEARNING-ASSESSMENT

- ***The teaching and learning methods used***

The discipline of Internal Medicine -Clinical Synthesis is taught in a classic form with lectures and practical lessons. The lectures are reproduced through theoretical presentations of the material. The practical lessons consist of:

Treating patients. Students treat 4-5 patients daily under the control of their lecturer and an attending physician. Students fill in case histories, statements of observation sheets, medical certificates and other medical documents. Students perform the clinical presentation of patients during the visits of the Head of the Department and lecture. Students participate in patient`s paraclinical investigations (radiography, endoscopy, etc.) and specialists' consultations.

The daily evolution of the disease and other notes from the case history will be checked and signed by the lecturer or attending physician.

The lecturer visits each student to check the student`s mastery of history taking, physical examination of the patient, fill in the case history as well as to make the diagnosis, to indicate treatment etc. Special attention will be given to the clinical thinking, differential diagnosis, differential treatment (selection of drug doses, fill in receipts, avoiding polypragmasia). The students study the characteristics of the disease progression and treatment efficacy. In fatal cases the students will be present at the autopsy and participate in the clinical-anatomical conferences.

Seminars. During the seminars the most important chapters of the Internal medicine such as the disease etiology, pathophysiology, clinical presentation, diagnosis and differential diagnosis, treatment, prevention and work capacity expertise will be analyzed and discussed.

The lesson takes the form of discussion, during which the reader appreciates the students' knowledge, explains the unclear material.

At the end of each discussed chapter the lecturer makes a generalization.

The analysis of clinical cases. The patients with diseases, the diagnosis of which is complicated or the patients with rare pathology that represents a theoretical and practical interest will be selected for analysis.

The characteristics of the disease progression and atypical development of the disease will be analyzed. The diagnosis will be argued and the differential diagnosis will be made. The treatment will be indicated with the argumentation of each indication. The disease prevention and work capacity expertise will be discussed.

The guards in the clinic. During the study of the discipline of Internal Medicine - Clinical Synthesis each student will make 2 guards in the clinic during which together with the doctor on call will make an evening visit of patients correcting, if necessary their treatment as well as assisting in medical emergencies, thus improving their knowledge in the diagnosis, differential diagnosis and practical skills.

During the morning conference (the next day) the students will report about the patients hospitalized the day before, the clinical evolution of the severely ill patients and of those under surveillance and medical emergency assistance.

The clinical conferences. Students actively participate in the conferences organized according to the schedule with reports, illustrative material, presenting patients with a complicated diagnosis and rarely encountered cases of interest.

The didactic and research activity consists in the preparation by students of referential materials from various fields of the internal medicine, illustrative materials, summary reports, participation in the clinical and scientific conferences.

- ***Applied didactic strategies / technologies*** *(discipline-specific)*

  "Group Interview", "Case Study"; "The round table".

  Practical work at the patient's bed.

- ***Methods of assessment*** *(*including an indication of how the final grade is calculated*)*

Current: frontal and / or individual control by:

- questioning;
- analysis of clinical case;
- solving of a problem / clinical cases;
- application of docimological tests;
- quizzes.

Students' knowledge will be evaluated daily, and at the end of each practical lesson the note will be announced.

Final evaluation: Exam.

Final grade calculation formula: Annual average – 30%, Practical skills – 20%, Testing – 50%.

Method of mark rounding at different assessment stages

Intermediate marks scale (annual average, marks from the examination stages)	National Assessment System	ECTS Equivalent
1,00-3,00	**2**	**F**
3,01-4,99	**4**	**FX**
5,00	**5**	**E**
5,01-5,50	**5,5**	
5,51-6,0	**6**	
6,01-6,50	**6,5**	**D**
6,51-7,00	**7**	
7,01-7,50	**7,5**	**C**
7,51-8,00	**8**	
8,01-8,50	**8,5**	**B**
8,51-9,00	**9**	
9,01-9,50	**9,5**	**A**
9,51-10,0	**10**	

The average annual mark and the marks of all stages of final examination (computer assisted, test, oral) - are expressed in numbers according to the mark scale (according to the table), and the final mark obtained is expressed in number with two decimals, which is transferred to student's record-book.

Absence on examination without good reason is recorded as "absent" and is equivalent to 0 (zero). The student has the right to have two re-examinations in the failed exam.

XI. RECOMMENDED LITERATURE:

A. Compulsory :

1. The course of lectures.
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B. Additional

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